

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for May 1978—continued
LATE RETURNS AND CORRECTIONS—continued

Station	Height of Station Above M.S.L.	Air Temperatures in Degrees Celsius								Rainfall in Millimetres					Bright Sunshine
		Means of		Mean of A and B	Difference From Normal	Absolute Maximum and Minimum				Total Fall	No. of Rain Days	Difference From Normal	Maximum Fall		
		A Max.	B Min.			Maximum	Date	Minimum	Date				Amount	Date	
	Metres	°C	°C	°C	°C	°C		°C		mm		mm	mm		Hrs
Kairanga, Palmerston North, April 1978	15	20.8	10.6	15.7	+2.3	24.0	13	5.5	13	98	8	..	39	19	147
Palmerston North D.S.I.R., April 1978	34	20.5	12.4	16.5	+2.8	24.4	13	8.1	24	134	11	+60	52	19	128
Pauatahanui, April 1978 ..	30	..	..	..	..	..	..	..	..	199	..	+135	78	19	..
Springs Junction, April 1978	421	17.6	..	..	..	..	..	..	..	87	11	-104	40	14	..
Ashburton, April 1978 ..	101	18.3	10.8	14.6	+2.9	30.2	7	6.1	11	190	14	+124	62	20	90
Ashley Forest, April 1978	107	18.0	10.5	14.3	+2.2	28.1	7	6.9	11	347	13	+273	108	17	109
Christchurch, April 1978 ..	7	18.6	11.6	15.1	+2.9	30.1	7	9.3	13	185	14	+127	41	19	..
Lincoln No. 3, April 1978	11	18.3	11.1	14.7	+3.2	29.8	7	3.8	24	171	12	+113	54	20	98
Fairlie, April 1978 ..	306	16.8	..	..	..	29.2	6	..	..	326	13	+270	136	17	..
Otiake Farm, April 1978 ..	183	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stewart Island, April 1978 ..	3	14.6	8.6	11.6	..	22.5	5	2.1	15	..	..	..	..	..	..
Totokoitu, Rarotonga, April 1978	9	28.1	22.5	25.3	..	30.4	6	18.9	30	189	18	..	54	18	..

The "normal" refers to the present site of the instruments. Standard period for normals is 1941-1970. No normals are available for stations with only short records.

*Indicates that the sunshine recorder is not located at the station but is in the near vicinity.

A rain day is a day with rainfall equal to or greater than 0.1 mm.

Where the extremes of temperature and rainfall have occurred more than once during the month, the date of the first occurrence is given.

NOTES ON THE WEATHER FOR MAY 1978

General—During May pressures were above normal over the whole of New Zealand, unusually high on the east coast of the South Island and to the south of the country. Winds were predominantly easterly over the North Island and south to south-west over the South Island. The month was warmer and drier than usual in most districts, the only regions with appreciably above normal rainfall being Westland, Fiordland, and parts of Northland and Southland. Grass growth was reported to be good in most areas, but some farmers found conditions too dry and had to irrigate pastures. Stock condition continued to improve slowly, but milk production had ceased in many parts of the North Island by the end of the month.

Rainfall—The only areas with rainfall above normal during the month were parts of Northland, Taranaki, Wellington, Marlborough, Canterbury, Otago, Southland, and the West Coast. Some districts in the Bay of Plenty and Waikato had less than 10 percent of their normal month's total. Unusually heavy falls were recorded at Milford Sound on the 11th/12th, more than 280 mm in 12 hours, and the 30th/31st when nearly 415 mm was measured in 24 hours. The latter fall was the heaviest recorded in 24 hours at Milford Sound in any month since February 1958.

Widespread flooding occurred in northern and western districts of Southland on the 30th/31st. At Dipton more than 51 mm was measured in 24 hours, and many other areas had more than 40 mm in the same period. It was reported that the Aparima River rose to nearly 4 metres above its normal level at Dunrobin. Many roads were closed throughout the region by floodwaters and damage to bridges.

Temperatures—Temperatures were above normal over most of New Zealand for the fifth consecutive month. The only areas that were slightly lower than usual were parts of Bay of Plenty, Central Districts of the North Island, and Hawke's Bay. Some areas in Canterbury, Otago, and Southland were above normal by more than 1½°C. A warm spell at the middle of the month, with maximum temperatures more than 5°C above normal, was followed by a prolonged cold spell from the 17th to 25th.

Sunshine—Total sunshine hours for the month were above normal over the northern half of the North Island and in parts of Nelson and Westland. Hokitika and Westport recorded nearly 30 hours more sunshine than normal. Many areas east of the main ranges had appreciably below normal sunshine hours. At Hanmer Forest only 58 hours were recorded for the month, and this is the lowest in any month since the station began in 1930. The previous lowest was 60 hours in June 1955.

WEATHER SEQUENCE

The anticyclone in the Tasman Sea, that had become almost stationary at the end of April, extended a ridge of high pressure onto New Zealand late on the 1st. The low pressure area to the north-east had started to move slowly east away from the country

early on the 2nd. Light falls of rain were recorded over most of the North Island. Temperatures were slightly warmer than usual over most of the South Island and the northern half of the North Island. From the 2nd to the 5th the anticyclone began to move slowly eastwards with pressures remaining low to the east of New Zealand. Small disturbances in the strong southerly airflow ahead of the anticyclone brought showery conditions to most areas on the east coast of the South Island, and to many areas of the North Island.

Early on the 8th the anticyclone had moved onto New Zealand, bringing fine weather to most of the country. Some areas in both Islands reported isolated showers. By the morning of the 10th the anticyclone began to move slowly east, and pressures had started to fall near Tasmania, and to the south of the country. On the 11th a depression near Tasmania had moved east, and a cold front associated with a depression passing to the south of the South Island had moved onto Fiordland. More than 300 mm of rain was recorded at Milford Sound in the 24 hours up to 9 a.m. on the 12th, and many other areas on the West Coast recorded between 150 and 250 mm in the same period. As the front crossed the country heavy rain was also recorded in Buller, Nelson, Wellington, and Taranaki. The only area in the South Island that did not record rain was the coastal Canterbury region. There were gale force northerly winds in the Cook Strait area on the 12th. Temperatures were very warm in Canterbury, and higher than usual over the rest of the country.

On the 12th the depression in the Tasman Sea had moved south-east, and another had developed in the north Tasman Sea. Pressures were also low to the north-east of New Zealand. By the 13th the situation had become complex, with one depression passing over Southland, another moving southeast towards the South Island, and a further depression developing just to the east of Tasmania. Cold fronts associated with these depressions crossed the country on the 13th, 14th, and 15th as the low pressure areas moved to the south of New Zealand. A small wave depression formed on one of these cold fronts early on the 15th and moved over Northland. The majority of the country reported rain during this period, the heaviest falls being in Northland, Waikato, Wellington, Nelson, and the West Coast.

Late on the 15th a ridge of high pressure extended onto the South Island from an anticyclone centred near Tasmania, but pressures remained low over the North Island. By the 16th the low pressure area to the north had developed two centres, east and west of the North Island, and the anticyclone had started to move to the south of the country. A small depression developed on a cold front near Chatham Islands and started to deepen on the 18th. Heavy rain was reported in Wairarapa, Wellington, and the Kaikoura coast and lighter falls in most of the North Island and the east coast of the South Island. The weather on the West Coast was fine during this period. Temperatures were colder than usual over most of New Zealand.